



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,682	07/02/2004	Dolf Henricus Jozef Van Casteren	NL 020007	6574

7590 07/07/2008
Philips Electronics North America Corporation
Corporate Patent Counsel
PO Box 3001
Briarcliff Manor, NY 10510

EXAMINER

LE, TUNG X

ART UNIT	PAPER NUMBER
----------	--------------

2821

MAIL DATE	DELIVERY MODE
-----------	---------------

07/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/500,682	Applicant(s) VAN CASTEREN, DOLF HENRICUS JOZEF	
	Examiner TUNG X. LE	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment submitted 03/31/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the Applicant's amendment submitted on March 31, 2008. In virtue of this amendment:

- Claim 5 is cancelled; and
- Thus, claims 1-4 and 6-12 remain pending in the instant application.

Upon reconsideration, the indicated allowability of claims 2, 6, and 11 is withdrawn in view of the newly discovered reference(s) to Bernitz et al. (U.S. Patent No. 5,680,015). Rejections based on the newly cited reference(s) follow.

Response to Applicant's arguments

1. Applicant's arguments with respect to claims 1-4 and 6-12 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6-7, and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Bernitz et al. (U.S. Patent No. 5,680,015; hereinafter "Bernitz").

With respect to claim 1, Bernitz discloses in figure 1 a circuit for a lamp [LP], comprising a first sub-circuit [FE, GL, HS] for connecting to mains voltage of a predetermined frequency (the AC power supply having a frequency of [60 Hz]) for rectifying the mains voltage and forming a rectified mains voltage [GL] having a first frequency (column 7, lines 14-26); a second

Art Unit: 2821

sub-circuit [WR, RK] connected to the first sub-circuit for providing an alternating current required for the lamp (having an switching inverter [WR] functioning to provide an alternating current to the lamp), the alternating current having a second frequency (column 8, lines 25-34); and a control circuit [MC] which is connected to the first sub-circuit and the second sub-circuit which controls the second frequency of the alternating current subject to the first frequency of the mains voltage rectified by the first sub-circuit (figure 1); wherein the second frequency of the alternating current provided by the second sub-circuit is synchronized with the first frequency (column 8, lines 35-52).

With respect to claim 2, Bernitz discloses in figure 1 a circuit for a lamp [LP], comprising a first sub-circuit [FE, GL, HS] for connecting to mains voltage of a predetermined frequency (the AC power supply having a frequency of [60 Hz]) for rectifying the mains voltage and forming a rectified mains voltage [GL] having a first frequency (column 7, lines 14-26); a second sub-circuit [WR, RK] connected to the first sub-circuit for providing an alternating current (having an switching inverter [WR] functioning to provide an alternating current to the lamp) required for the lamp, the alternating current having a second frequency (column 8, lines 25-34); and a control circuit [MC] which is connected to the first sub-circuit and the second sub-circuit and which controls the second frequency of the alternating current subject to the first frequency of the mains voltage rectified by the first sub-circuit (figure 1), wherein the first sub-circuit comprises a filter with one or more coils and capacitors (having a radio noise filter [FE] which includes a filter, a coil and capacitor for an EMI circuit for filtering noises of the power supply), a rectifier circuit [GL], a switch (figure 2, element [T1]) and a buffer capacitor (figure 2, element [C2]) that is coupled to its output terminals (figure 2).

With respect to claim 3, Bernitz discloses in figure 2 that wherein the second sub-circuit comprises a converter (having a boost converter [L1, D1, T1] for stabilizing direct current and a switching device [T1] for providing a square-wave current of a desired level (column 3, lines 34-39).

With respect to claim 4, Bernitz discloses in figures 1-2 that wherein the control circuit is connected on one side to a switch [T1] in the first sub-circuit and on the other side to one or more switches [T2, T3] in a switching device [WR], so that the phase and/or frequency of the lamp current controlled by the switching device is controlled subject to the first frequency of the mains voltage or a multiple thereof (column 8, lines 21-52).

With respect to claim 6, Bernitz discloses in figure 1 a circuit for a lamp [LP], comprising a first sub-circuit [FE, GL, HS] for connecting to mains voltage of a predetermined frequency (the AC power supply having a frequency of [60 Hz]) for rectifying the mains voltage and forming a rectified mains voltage [GL] having a first frequency (column 7, lines 14-26); a second sub-circuit [WR, RK] connected to the first sub-circuit for providing an alternating current required for the lamp (having an switching inverter [WR] functioning to provide an alternating current to the lamp), the alternating current having a second frequency (column 8, lines 25-34); and a control circuit [MC] which is connected to the first sub-circuit and the second sub-circuit which controls the second frequency of the alternating current subject to the first frequency of the mains voltage rectified by the first sub-circuit (figure 1), wherein the control circuit controls a phase of the alternating current provided by the second sub-circuit such that this is the same as a phase of the first frequency of the rectified mains voltage supplied by the first sub-circuit (column 10, lines 6-20 and column 11, lines 1-9).

With respect to claim 7, Bernitz discloses in figure 2 that wherein the second sub-circuit comprises an igniter [LC] for generating voltage pulses across the lamp so as to ignite the lamp.

With respect to claim 10, Bernitz discloses in figures 1-2 a method for operating a lamp [LP], comprising the acts of forming a rectified mains voltage [GL] by rectifying a supplied mains voltage (an AC power source) having a first frequency (the AC power supply having a frequency of [60 Hz]) and bringing a voltage level (an AC supplied voltage) to a desired voltage level (an output voltage of the rectifier [GL]); generating from the rectified mains voltage a voltage signal having a second frequency (column 7, lines 14-26); and generating an alternating current [WR] having a third frequency (column 8, lines 25-34) to operate lamp; wherein the third frequency of the alternating current is synchronized with the second frequency (column 8, lines 35-52).

With respect to claim 11, Bernitz discloses in figures 1-2 a method for operating a lamp [LP], comprising the acts of forming a rectified mains voltage [GL] by rectifying a supplied mains voltage (an AC supplied power source) and bringing a voltage level (an AC supplied voltage of the AC power source) of the mains voltage to a desired voltage level (a DC output voltage of the rectifier [GL]); generating from the rectified mains voltage a signal having a first frequency (column 7, lines 14-26); and generating an alternating current [WR] having a second frequency (column 8, lines 25-34); wherein the second frequency of the alternating current is controlled subject to the first frequency, and wherein a phase of the alternating current is equal to a phase of the signal (column 10, lines 6-20 and column 11, lines 1-9).

Art Unit: 2821

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernitz.

With respect to claims 8-9, Bernitz discloses all of the claimed subject matter, as expressly recited in claim 1, except for specifying that voltage ranges of the rectified mains voltages 100V-150V or 10V-100V. However, such a difference is not of patentable merits since the output rectified voltage level may affect to the desired output alternating current level of the inverter that is required to illuminate the lamp. Therefore, to employ the rectified voltage level of Bernitz having the voltage ranges 100V-150V or 10V-100V to be suitable to a desired application or environment of use would have been deemed obvious to a person skilled in the art.

Regarding claim 12, Bernitz discloses all of the claimed limitations, as expressly recited in claims 1 and 3, except for specifying that the desired level is ± 0.8 A for normal operation of the lamp. However, such a desired level of ± 0.8 A is not of patentable merits since the current level can be selected at a desired level based on a particular application or environment of use and such a level of current flowing through the lamp is related to the brightness as well. Therefore, to employ the current range of Bernitz at ± 0.8 A to be suitable to a desired application or environment would have been deemed obvious to a person skilled in the art.

Remarks and Conclusion

Art Unit: 2821

6. In response to the Applicant's arguments on the amended claims 1, 3-4, 7, and 10 at page 10 in the third paragraph that Kamoi does not teach or suggest "*wherein the second frequency of the alternating current provided by the second sub-circuit is synchronized with the first frequency*", the Examiner agrees that such the feature is not disclosed therein. However, these claims are now rejected as being anticipated by the teaching of a newly prior art to Bernitz (see claims rejected under 35 USC 102 above for details).

Inquiry

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUNG X. LE whose telephone number is (571)272-6010. The examiner can normally be reached on 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on 571-272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/500,682
Art Unit: 2821

Page 8

/Thuy Vinh Tran/
for Le, Tung X., Examiner of Art Unit 2821
07/02/2008